

Table 1 Minimum interommatidial angles for insect species ^a

Order	Species	Eye Type	$\Delta\phi$	Method	Ref.
Apterygota					
Collembola	<i>Dicyrtomina ornata</i>	A	25–57°	A	55
Pterygota					
Ephemeroptera	<i>Ephemerella vulgata</i>	A?	2.2°	A	48
	<i>Atelophlebia</i> sp. ♂	(D) OS?	2.0°	A	24
		(V) A?	3.3°	A	24
Odonata	<i>Anax junius</i>	A	0.24°	P	69
	<i>Sympetrum striolatum</i>	(D) A	0.4°	P	35
		(V) A	1.8°	P	35
	<i>Austrogomphus guerini</i>	A	0.58°*	P	23
	<i>Zyxomma obtusum</i>	A	0.65°*	P	23
	<i>Aeschna grandis</i>	A	0.8°	A	48
	<i>Xanthagrion erythroneurum</i>	A	1.2°*	P	23
Orthoptera	<i>Locusta migratoria</i>	A	0.9°*	P	23
Phasmida	<i>Dixippus morosus</i>	A	7.5°	A	48
Dermoptera	<i>Forficula auricularia</i>	OR	7.2°	P	50
Dictyoptera	<i>Tenodera australasiae</i>	A	0.6–2.5°	P	60
	<i>Orthodera ministralis</i>	A	1.2°*	P	23
	<i>Culifina</i> sp.	A	0.8°*	P	23
Hemiptera	<i>Gerris paludum</i>	OR	2.1°*	P	8
	<i>Notonecta glauca</i>	OR	1.65°*	P	65
Neuroptera	<i>Sialis flavilatera</i>	A?	2.4°	A	48
	<i>Ascalaphus</i> sp.	(D) OS	1.4°	A	64
	<i>Ascalaphus</i> sp.	(V) OS	2.0°	A	64
Coleoptera	<i>Cicindela hybrida</i>	A	1.5°	A	48
	<i>Anoplognathus pallidicollis</i>	OS	1.5°	A,P	85
	<i>Cantharis livida</i>	A	1.8°	A	48
	<i>Photinus versicolor</i>	OS	1.8°	A	22
	<i>Onitis alexis</i>	OS	2.5°	A	85

(Continued)

Table 1 (Continued)

Order	Species	Eye Type	$\Delta\phi$	Method	Ref.	
<i>Coccinella</i>						
	<i>septempunctata</i>	A	2.9°	A	83	
	<i>Chrysomela fastuosa</i>	A	5.4°	A	83	
	<i>Zophobas morio</i>	OR	5.9°	P	50	
	<i>Lixus blakeae</i>	A	6°	AB	87	
	<i>Tenebrio molitor</i>	A	6.5°	AB	87	
<i>Chlorophanus</i>						
	<i>viridis</i>	A	7°	AB	87	
	<i>Phyllobius urticae</i>	A	7°	A	83	
Lepidoptera	<i>Papilio macaon</i>	AA	0.9°	A	48	
	<i>Heteronympha merope</i>	AA	1.4–2.6°	P	39	
	<i>Pieris brassicae</i>	AA	1.8°	A	83	
<i>Phalaenoides</i>						
	<i>tristifica</i>	OS	1.9°	O	37	
	<i>Ocybadistes walkeri</i>	OS	2.0°	O	37	
	<i>Ephestia kühniella</i>	OS	3°	A	6	
Diptera	<i>Syritta pipiens</i>	♂	NS	0.6°	P	7
			NS	1.5°	P	7
	<i>E. tenax</i> ♂	♂	NS	1°	A	48
	<i>Calliphora</i>	♂	NS	1.1°	P	42
	<i>erythrocephala</i>		NS	1.3°	P	42
	<i>Bibio marci</i> ♂	(D)	NS	1.6°	P	90
		(V)	NS	3.7°	P	90
	<i>Musca domestica</i>		NS	2.5°	APB	87
<i>Drosophila</i>						
	<i>melanogaster</i>		NS	5°	APB	87
	<i>Tipula pruinosa</i>		OR	5.8°	P	50
<i>Hymenoptera</i>						
	<i>Bembix palmata</i>	A	0.41°*	P	23	
	<i>Apis mellifera</i>	♂	A	0.8°	A	48
		worker	A	1°	APB	87
			A	1.3°	A	48
	<i>Amegilla</i> sp.		A	1°*	P	23
	<i>Vespa vulgaris</i>		A	1°	A	48
	<i>Myrmecia gulosa</i>		A	1.7°	P	84
	<i>Cataglyphis bicolor</i>		A	4°	P	92

^a(D) dorsal eye; (V) ventral eye. Eye type: A, apposition; AA, afocal apposition; NS, superposition; OR, open rhabdom; OS, optical superposition; ?, uncertain. Methods: A, anatomy; B, behaviour; O, ophthalmoscopy; P, pseudopupil. * indicates a value derived from data in the reference, usually by calculating $\Delta\phi$ as $(\Delta\phi_h^2 + \Delta\phi_v^2)^{1/2}$.